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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,924	04/20/2004	Holly Hurlbut Hogrefe	04121.0161-02000	5896
27495 7590 12/04/2007 AGILENT TECHNOLOGIES INC P.O BOX 7599 BLDG E, LEGAL LOVELAND, CO 80537-0599			EXAMINER HUTSON, RICHARD G	
			ART UNIT 1652	PAPER NUMBER
			NOTIFICATION DATE 12/04/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

IPOPS.LEGAL@agilent.com  
maria\_carroll@non.agilent.com  
laurie\_schutze@agilent.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/828,924	<b>Applicant(s)</b> HOGREFE ET AL.	
	<b>Examiner</b> Richard G. Hutson	<b>Art Unit</b> 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7-14, 23-25 and 57-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3, 7-14 and 23-25 is/are allowed.
- 6) ☒ Claim(s) 57-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's amendment of claim 57, in the paper of 9/19/2007, is acknowledged.

Claims 1-3, 7-14, 23-25 and 57-59 are at issue and are present for examination.

Applicants' arguments filed on 9/19/2007, have been fully considered and are deemed to be persuasive to overcome some of the rejections previously applied.

Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 57-59 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This rejection was originally stated in the previous office action as it applied to previous claims 57-59. In response to this rejection, applicants have amended claim 57 and traverse the rejection as it applies to the newly amended claims.

Applicants traverse this rejection on the basis that applicants claims previously recited structure (i.e. a polynucleotide encoding an amino acid sequence possessing 95% identity to SEQ ID NO: 66) and applicants while disagreeing with the basis of the previous rejection, have amended the claims to additionally recite "wherein the encoded amino acid sequence binds to single stranded DNA."

Applicant's complete argument is acknowledged and has been carefully considered, however, is not found persuasive for the reasons previously stated and repeated herein.

It continues that applicant's submission that the present claims recite both specific structure and specific function, is not persuasive. While it continues to be recognized that the rejected claim recites structure (i.e. encoding a polypeptide comprising SEQ ID NO: 66, or possessing 95% identity to SEQ ID NO: 66), the rejected claims do not require a specific function. Applicant's amendment requiring that the "encoded amino acid sequence binds to single stranded DNA" is not considered a sufficiently specific function that applicants have adequately described a structure to function relationship for the claimed genus. The mere binding to single stranded DNA is insufficient to suffice for a functional limitation of the claimed genus. Applicant's attention is directed to applicant's specification in which applicants state "(RFA) that bind and stabilize the resulting single-stranded DNA template". This more complete functional description of the claimed RFA protein may be helpful to applicants.

Given this lack of additional representative species as encompassed by the claims and an associated description, Applicants have failed to sufficiently describe the

claimed invention, in such full, clear, concise, and exact terms that a skilled artisan would recognize Applicants were in possession of the claimed invention.

Applicant is referred to the revised guidelines concerning compliance with the written description requirement of U.S.C. 112, first paragraph, published in the Official Gazette and also available at [www.uspto.gov](http://www.uspto.gov).

Claims 57-59 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an isolated polynucleotide encoding the archaeal replication factor A of SEQ ID NO: 66 or an isolated host cell transformed with a vector comprising said polynucleotide, does not reasonably provide enablement for any polynucleotide encoding the archaeal replication factor A having 95% identity to SEQ ID NO: 66 or a host cell transformed with said polynucleotide, wherein the encoded amino acid sequence binds to single stranded DNA. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

This rejection was originally stated in the previous office action as it applied to previous claim 57. In response to this rejection, applicants have amended claims 57 and traverse the rejection as it was applied previously to the newly amended claims.

Applicants traverse this rejection on the basis that applicants have now amended claim 57 to make explicit what was already implicit in claim 57, i.e., that for the polynucleotide encoding an amino acid sequence possessing 95% identity to SEQ ID NO:66, "the encoded amino acid sequence binds to single stranded DNA." Applicants

submit that this amendment renders the enablement rejection moot and, therefore, Applicant respectfully requests that the Office withdraw this rejection.

As above, applicant's complete argument is acknowledged and has been carefully considered, however, is not found persuasive for the reasons previously stated and repeated herein.

It continues that applicant's submission that the present claims recite both specific structure and specific function, is not persuasive. While it continues to be recognized that the rejected claim recites structure (i.e. encoding a polypeptide comprising SEQ ID NO: 66, or possessing 95% identity to SEQ ID NO: 66), the rejected claims do not require a specific function. Applicant's amendment requiring that the "encoded amino acid sequence binds to single stranded DNA" is not considered a sufficiently specific function that applicants have enabled the full scope of the claimed genus. The mere binding to single stranded DNA is insufficient to suffice for a functional limitation of the claimed genus. As above, applicant's attention is directed to applicant's specification in which applicants state "(RFA) that bind and stabilize the resulting single-stranded DNA template". This more complete functional description of the claimed RFA protein may be helpful to applicants.

Thus, applicants have not provided sufficient guidance to enable one of ordinary skill in the art to make and use the claimed invention in a manner reasonably correlated with the scope of the claims broadly including any polynucleotide encoding an archaeal replication factor A having 95% identity to SEQ ID NO: 66, wherein the encoded amino acid sequence binds to single stranded DNA. The scope of the claims must bear a

reasonable correlation with the scope of enablement (In re Fisher, 166 USPQ 19 24 (CCPA 1970)). Without sufficient guidance, how to make and use the genus of those polynucleotides having the desired biological characteristics continues to be unpredictable and the experimentation left to those skilled in the art is unnecessarily, and improperly, extensive and undue. See In re Wands 858 F.2d 731, 8 USPQ2nd 1400 (Fed. Cir, 1988).

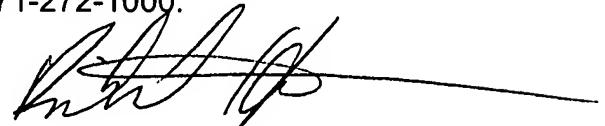
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard G. Hutson whose telephone number is 571-272-0930. The examiner can normally be reached on M-F, 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on 571-272-0928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Richard G. Hutson', with a long horizontal line extending to the right.

Richard G Hutson, Ph.D.  
Primary Examiner  
Art Unit 1652

rg  
11/28/2007